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(71) Applicant (for all designated States except US): **FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V. [DE/DE]**; Hansastrasse 27 c, 80686 München (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MÜLLER, Klaus-Robert [DE/DE]**; Fregestrasse 7 A, 12159 Berlin

(DE). **LASKOV, Pavel [RU/DE]**; Flemmingstrasse 10, 12555 Berlin (DE). **TAX, David [NL/DE]**; Arndtstrasse 28, 12489 Berlin (DE). **SCHÄFER, Christin [DE/DE]**; Bouchestrasse 22, 12435 Berlin (DE).

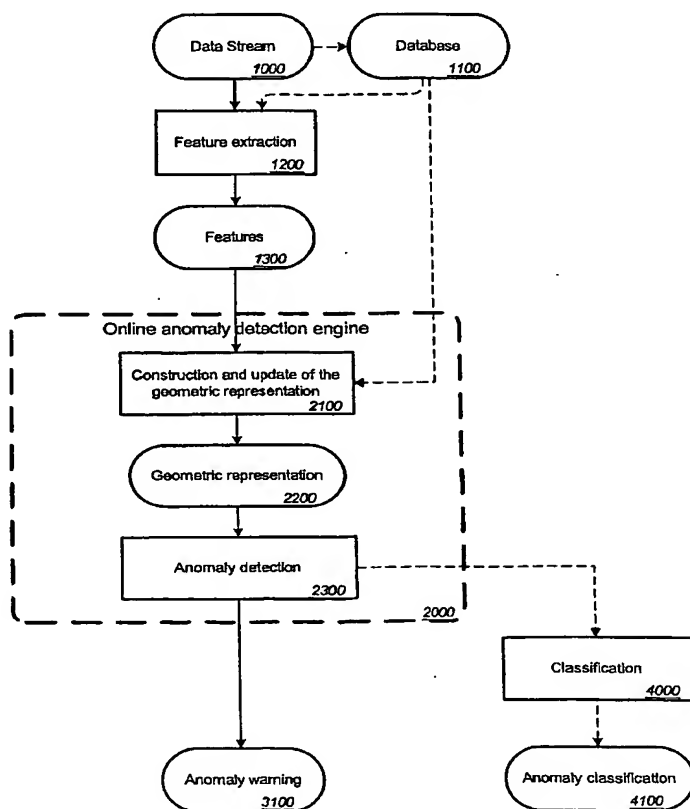
(74) Agent: **GROSS, Felix**; Maikowski & Ninnemann, Postfach 15 09 20, 10671 Berlin (DE).

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(54) Title: METHOD AND APPARATUS FOR AUTOMATIC ONLINE DETECTION AND CLASSIFICATION OF ANOMALOUS OBJECTS IN A DATA STREAM



(57) Abstract: The invention is concerned with a method for automatic online detection and classification of anomalous objects in a data stream, especially comprising datasets and / or signals, characterized in that a) the detection of at least one incoming data stream (1000) containing normal and anomalous objects, b) automatic construction (2100) of a geometric representation of normality (2200) the incoming objects of the data stream (1000) at a time t_1 subject to at least one predefined optimality condition, especially the construction of a hypersurface enclosing a finite number of normal objects, c) online adaptation of the geometric representation of normality (2200) in respect to received at least one received object at a time $t_2 \geq t_1$, the adaptation being subject to at least one predefined optimality condition, d) online determination of a normality classification (2300) for received objects at t_2 in respect to the geometric representation of normality (2200), e) automatic classification of normal objects and anomalous objects based on the generated normality classification (2300) and generating a data set describing the anomalous data for further processing, especially a visual representation.

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